

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (previously presented) A heat exchanger having mounting members to which a blower is to be attached, comprising:

a plurality of metallic tubes through which fluid flows in a fluid flow direction;

a pair of metallic header tanks communicating with the plurality of tubes, each of the pair of header tanks being arranged at lengthwise opposite ends of the tubes and extending perpendicular to the lengthwise direction of the tubes, each of the pair of header tanks defining a rectangular cross section fluid chamber having a long side wall and a short side wall each of said header tanks being disposed such that said long side wall is generally parallel to said fluid flow direction and said short side wall is generally perpendicular to said fluid flow direction, concave and convex portions being formed in a first portion of the long side wall of the header tank by plastic deformation;

a respective mounting member secured on said long side wall of each of the header tanks; and

a reinforcement attached to each of the mounting members on the side of the mounting member in contact with the long side wall, for strengthening the long side wall surface.

2. (canceled)

3. (previously presented) A heat exchanger as defined by claim 1, wherein each of the reinforcements extends from a middle point of the long side wall toward opposite sides of the long side wall.

4. (canceled)

5. (previously presented) A heat exchanger as defined by claim 1, wherein each of the reinforcements has a tapered section so that a cross-sectional area of the reinforcement increases as approaching the long side wall of the header tanks.

6. (canceled)

7. (previously presented) A heat exchanger as defined in claim 1, wherein each of the reinforcements and a respective mounting member are integrally formed.

8. (canceled)

9. (previously presented) A heat exchanger having mounting members to which a blower is to be attached, comprising:

a plurality of metallic tubes through which fluid flows in a fluid flow direction;

a pair of metallic header tanks communicating with the plurality of tubes, each of the pair of header tanks being arranged at lengthwise opposite ends of the tubes and extending perpendicular to the lengthwise direction of the tubes, each of the pair of header tanks defining a rectangular cross section fluid chamber having a long side wall and a short side wall, each of said header tanks being disposed such that said long side wall is generally parallel to said fluid flow direction and said short side wall is generally perpendicular to said fluid flow direction;

a respective mounting member secured on said long side wall of each of the header tanks; and

a reinforcement attached to each of the mounting members on the side of the mounting member in contact with the long side wall, for strengthening the long side wall, wherein the reinforcements and a respective mounting member are formed separately from each other.

10. (previously presented) A heat exchanger as defined by claim 1, wherein each of the reinforcement and a respective mounting member are formed separately from each other.

11. (previously presented) A heat exchanger as defined in claim 1, wherein the tubes are connected to each of the header tanks on the short side wall thereof.

12. (canceled)

13. (previously presented) A heat exchanger having mounting members to which a blower is to be attached, the heat exchanger comprising:

a plurality of metal tubes through which fluid flows;

a pair of metallic header tanks communicating with the plurality of tubes;

each of the pair of header tanks defining a fluid chamber and being arranged at lengthwise opposite ends of the tubes and extending perpendicular to the lengthwise direction of the tubes, each of the fluid chambers defined by the pair of header tanks having a rectangular cross section in a direction parallel to the lengthwise direction of the tubes;

a respective mounting member secured to a longer side wall of each of the header tanks, the mounting member being secured to a portion of the longer side wall forming the fluid chamber;

a reinforcement attached to each of the mounting members on the side of the mounting member in contact with the longer side wall for strengthening the longer side wall for strengthening the longer side wall; and

concave and convex portions formed in a portion of the long side wall of the header tank by plastic deformation.

14. (previously presented) A heat exchanger having mounting members to which a blower is to be attached, the heat exchanger comprising:

a plurality of metal tubes through which fluid flows;

a pair of metallic header tanks communicating with the plurality of tubes, each of the pair of header tanks being arranged at lengthwise opposite ends of the

tubes and extending perpendicular to the lengthwise direction of the tubes, each pair of header tanks defining a rectangular cross section fluid chamber in a direction parallel to the lengthwise direction of the tubes;

a respective mounting member secured to a longer side wall of each of the header tanks;

a reinforcement attached to each of the mounting member on the side of the mounting members in contact with the longer side wall, the reinforcement defining an increased wall thickness in a localized area to strengthen the longer side wall; and

concave and convex portions formed in a portion of the long side wall of the header tank by plastic deformation.

15. (previously presented) A heat exchanger as defined by claim 1, wherein the respective mounting member is secured on a second portion of the long side wall, the second portion being different than the first portion.

16. (previously presented) A heat exchanger as defined by claim 1, wherein each of the header tanks comprises a pair of L-shaped plate members in which said concave and convex portions are formed by press forming.

17. (new) The heat exchanger according to claim 13, wherein the concave and convex portions are formed between adjacent mounting members.

18. (new) The heat exchanger according to claim 14, wherein the concave and convex portions are formed between adjacent mounting members.

19. (new) A heat exchanger having mounting members to which a blower is to be attached, the heat exchanger comprising:

a plurality of metal tubes through which fluid flows;

a pair of metallic header tanks communicating with the plurality of tubes, each of the pair of header tanks being arranged at lengthwise opposite ends of the tubes and extending perpendicular to the lengthwise direction of the tubes, each pair of header tanks defining a rectangular cross section fluid chamber in a direction parallel to the lengthwise direction of the tubes;

a plurality of respective mounting members secured to a longer side wall of each of the header tanks;

a reinforcement attached to each of the mounting member on the side of the mounting members in contact with the longer side wall, the reinforcement defining an increased wall thickness in a localized area to strengthen the longer side wall; and

concave and convex portions formed the long side wall of the header tank in between adjacent mounting members and adjacent reinforcements by plastic deformation.